IN THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in the above-referenced application.

1. (Currently Amended) A semiconductor light emitting device comprising a light emitting layer disposed between an n-type region and a p-type region, wherein:

the light emitting layer ~~is~~ comprises a wurtzite crystal structure;

a <0001> axis is substantially parallel to a top surface of the light emitting layer; and

the light emitting layer has a thickness greater than 25 Å.

2. (Original) The device of claim 1 wherein the light emitting layer has a thickness greater than 50 Å.

3. (Original) The device of claim 1 wherein the light emitting layer has a thickness greater than 90 Å.

4. (Original) The device of claim 1 wherein the light emitting layer has a thickness greater than 150 Å.

5. (Original) The structure of claim 1 wherein the light emitting layer comprises $\{11\bar{2}0\}$ InGaN.

6. (Original) The structure of claim 1 wherein the light emitting layer comprises $\{10\bar{1}0\}$ InGaN.

7. (Original) The structure of claim 1 wherein the light emitting layer comprises one of AlGaN and AlInGaN.

8. (Original) The device of claim 1 wherein a composition of indium in the light emitting layer is graded from a first indium composition in a first portion of the light emitting layer proximate the n-type region to a second indium composition in a second portion of the light emitting layer proximate the p-type region.

9. (Original) The device of claim 8 wherein the first composition is greater than the second composition.

10. (Original) The device of claim 8 wherein the first composition is less than the second composition.

11. (Original) The device of claim 8 wherein a composition of aluminum in the light emitting layer is graded from a first aluminum composition in a first portion of the light emitting layer proximate the n-type region to a second aluminum composition in a second portion of the light emitting layer proximate the p-type region.

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12. (Original) The device of claim 1 wherein a composition of aluminum in the light emitting layer is graded from a first aluminum composition in a first portion of the light emitting layer proximate the n-type region to a second aluminum composition in a second portion of the light emitting layer proximate the p-type region.

13. (Original) The device of claim 12 wherein the first composition is greater than the second composition.

14. (Original) The device of claim 12 wherein the first composition is less than the second composition.

15. (Original) The device of claim 1 wherein the light emitting layer is a first quantum well, the device further comprising:

a second quantum well; and

a barrier layer disposed between the first and second quantum well;

wherein the first quantum well, second quantum well, and barrier layer form an active region.

16. (Original) The device of claim 15 wherein an indium composition in one of the first and second quantum wells is graded.

17. (Original) The device of claim 15 wherein the barrier layer has a graded composition.

18. (Previously Presented) The device of claim 15 further comprising first and second cladding layers, wherein the active region is disposed between the first and second cladding layers.

19. (Previously Presented) The device of claim 18 wherein the first and second cladding layers have a larger band gap than the first and second quantum wells.

20. (Previously Presented) The device of claim 18 wherein:

each of the first and second cladding layers is graded from a first band gap in a portion of the cladding layers adjacent to the active region to a second band gap in a portion of the cladding layers spaced apart from the active region; and

the second band gap is greater than the first band gap.

21. (Original) The device of claim 20 wherein a composition of indium in the first and second cladding layers is graded.

22. (Original) The device of claim 1 wherein the device operates at a current density greater than 10 A/cm^2.

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23. (Original) The device of claim 1 wherein the device operates at a current density greater than 100 A/cm^2.

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